

Product Technical Data

Eclipse®

Petroleum Based Pavement Sealer Concentrate

Key Advantages

Description

Eclipse® is a premium petroleum resin emulsion pavement sealer designed to be field mixed with mineral aggregate for superior longevity. It is suitable for use on any asphalt pavement. Eclipse® is produced with a colloid mill in a state of the art continuous process for unparalleled control and consistency of resin particle size and distribution. Eclipse® exhibits excellent bonding to any asphalt surface and is highly resistant to gasoline and oil penetration as well as degradation from ultraviolet light. It forms a tough weather proof barrier on porous asphalt surfaces and provides excellent wear resistance. Eclipse is supplied as a concentrate, requiring dilution with water prior to application.

- Unique, high performance resin base
- Alternative to both refined tar and asphalt emulsion based sealers
- Significantly out-performs asphalt based sealers
- Gasoline and oil resistant
- Provides excellent adhesion and wear resistance
- Continuous process colloid mill production assures the highest standard for product quality and consistency



Application

Eclipse® must be applied to clean, structurally sound asphalt pavements that are surface cured and free from all loose and foreign debris. Wide cracks, alligatored areas and soft or sunken pavement must be properly repaired. The pavement surface must be dry. Areas previously saturated from sub-surface moisture must be dry and show no signs of renewed seepage for 24 hours prior to application. Oil and grease spots must be properly cleaned and primed prior to sealing. All vegetation should be treated with a water based herbicide at least one (1) week prior to sealing and removed during final surface preparations.

Eclipse® can be applied by using spray equipment, mechanical squeegee equipment, brush or rubber squeegee. All application equipment must be capable of applying a sufficient quantity to uniformly coat the pavement surface at the specified application rates.

Specifications

Eclipse® meets the performance criteria described in most specifications for asphalt and refined tar based pavement sealers. As it is a petroleum resin, not asphalt or refined tar however, it does not have the same composition as asphalt based sealers made from SS1-h or CSS1-h. The following section contains typical test data for standards that are specific to the physical properties and performance of pavement coatings.

Eclipse® meets the following standards used primarily for asphalt based pavement sealers for physical properties and performance:

| Standard | Property |
|------------|--|
| ASTM D5 | Penetration of Bituminous Materials |
| ASTM D139 | Float Test for Bituminous Materials |
| ASTM D217 | Cone Penetration |
| ASTM D529 | Carbon-Arc Accelerated Weathering |
| ASTM D2939 | Emulsified Bitumens as Protective Coatings |
| ASTM D3910 | Wet Track Abrasion |

Eclipse® does not contain refined coal tar but meets the following standards used primarily for refined tar based sealers for physical properties and performance:

| Standard | Property |
|------------|--|
| ASTM D5 | Penetration of Bituminous Materials |
| ASTM D139 | Float Test for Bituminous Materials |
| ASTM D2939 | Emulsified Bitumens as Protective Coatings |
| ASTM D4072 | Solubility in Toluene |
| ASTM D5727 | Emulsified Refined Tar Coatings (Characteristics) |
| FAA P-625 | Federal Aviation Administration Specifications for Airfield Surface Treatments |
| FAA P-627 | |
| FAA P-630 | |
| FAA P-631 | |

Eclipse® Typical Properties:

| Property | Typical |
|------------------------------|------------------------------|
| Non-volatile content, % | 48.00 - 49.00 |
| Ash of Non-Volatile, % | 36.00 - 37.00 |
| Drying time, hours | 4.0 |
| Adhesion/resistance to water | No penetration/adhesion loss |
| Flexibility | No cracking or flaking |
| Specific Gravity at 25° C. | 1.25 |



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Mix Designs and Usage:

Eclipse®, as supplied, is a concentrated pavement sealer designed to be mixed with water and mineral aggregate to form a ready to use pavement coating. The components are proportioned based upon a number of factors including age, texture and porosity of the pavement to be sealed, as well as the amount of traffic the pavement will receive (see recommendations below for further details).

Aggregates

Aggregates, such as silica sand and boiler slag, must be washed, graded and free from dust, clay or other foreign contaminants. The aggregate must be angular and of medium grain fineness.

Latex Additives

Approved latex additives may be added to Eclipse® to improve the sealer's durability, gas and oil resistance, drying time and color (see recommendations below for suggested mix designs).

Coverage:

Based upon the below referenced mix designs, Eclipse® coverage rates are as follows:

- 1st Coat - 0.10 - 0.15 gallon per square yard
- 2nd Coat - 0.08 - 0.12 gallon per square yard
- 3rd Coat - 0.08 - 0.12 gallon per square yard

When multiple coats are used, allow previous coat to dry so that it will withstand traffic without scuffing before applying the next coat of sealer. Temperatures below 70° F, relative humidities above 50%, and lack of air movement will retard curing and lengthen the time between coats.

Packaging:

55 gallon metal drums and 4,500 gallon bulk tankers.

Precautions:

Apply Eclipse® to unsealed asphalt pavements or to surfaces previously sealed with refined tar or asphalt emulsion pavement sealers.

Some discoloration of the freshly applied film may occur in the presence of excessive moisture. Areas saturated or actively seeping subsurface moisture must be allowed to thoroughly dry before sealing with Eclipse®.

New asphalt pavements and repair areas must be allowed to cure for a minimum of sixty (60) days at a minimum daytime temperature of 60° F, before sealing with Eclipse®. A simple test to determine if pavement is ready to be sealed is to cast a gallon or two of clean water over the surface. If the water sheets out, uniformly wetting the surface and no oil rings appear, the surface is ready to be sealed. If the water balls up and/or shows signs of oil rings, the surface is not ready to be sealed and should be allowed to cure longer.

Eclipse® may cause minor skin irritation. As with all chemicals, wear splash resistant goggles, protective gloves and clothing when applying Eclipse®. In case of skin or eye contact, immediately flush area with clean water. Consult Safety Data Sheet for more information on safety and handling.

Limitations:

Eclipse® must be applied only when ambient and pavement temperatures are a minimum of 50° F and are expected to remain there for at least twenty-four (24) hours after sealer application.

Eclipse® must be applied to surfaces that are dry and free from subsurface moisture. Eclipse® must not be applied during rainy or wet conditions such as foggy or overcast days with high relative humidity or when rain is predicted within twenty-four (24) hours after sealer application.

Contact the Brewer Company for warranty information.

| Mix Designs: | | | | | | |
|--|--------------------------|---------------------|----------------------|--------------------|-----------------------|-----------------------|
| Areas of Use | Type of Mix | No. of Coats | Eclipse gals. | Water gals. | Aggregate lbs. | Additive gals. |
| Pedestrian Only (playgrounds) | Latex fortified emulsion | 1st coat | 100 | 35-40 | 100-200 | 2-3 |
| | | 2nd coat | 100 | 35-40 | 100-200 | 2-3 |
| Low Traffic (residential driveways) | Standard emulsion | 1st coat | 100 | 30-35 | 0-200 | 0 |
| | | 2nd coat | 100 | 30-35 | 100-200 | 0 |
| | Latex fortified emulsion | 1st coat | 100 | 30-35 | 0-200 | 1-2 |
| | | 2nd coat | 100 | 30-35 | 100-200 | 1-2 |
| Moderate Traffic (parking areas) | Latex fortified emulsion | 1st coat | 100 | 25-35 | 0-300 | 2-3 |
| | | 2nd coat | 100 | 35-35 | 100-300 | 2-3 |
| High Traffic (drive lanes) | Latex fortified emulsion | 1st coat | 100 | 25-35 | 0-400 | 3-4 |
| | | 2nd coat | 100 | 25-35 | 100-400 | 3-4 |
| | | 3rd coat | 100 | 30-35 | 100-400 | 3-4 |